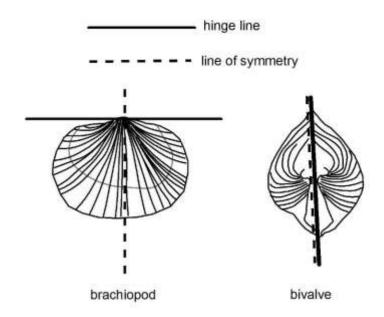


Phylum Brachiopoda (Cambrian to Recent)

Brachiopoda is a phylum of marine animals whose soft bodies are enclosed by a shell consisting of two halves (valves). In this way they resemble clams, but their soft-part anatomy differs considerably from that of clams. Furthermore, the nature of the valves is quite different from that of clams. Brachiopods are bilaterally symmetrical to a plane perpendicular to the hinge-line while bivalves (clams or Pelecypods) are bilaterally symmetrical to a plane parallel to the hinge-line.



Brachiopods live attached to the sea floor by a flexible stalk. At the beak of some species, there can be seen a tiny hole through which the stalk protruded. They have been divided into two broad groups - articulata (those having "teeth" that hinge the valves) and inarticulate

(those lacking hinge-teeth). The teeth are hidden from view in specimens in which both valves are together. The great majority of brachiopods are of the articulate variety.

These animals were very abundant during the Paleozoic Era but gradually gave way to clams. Consequently, brachiopods are common in Paleozoic rocks of Arkansas, whereas clams are far more common in younger rocks.

*Top drawing and excerpt from Fossils of Arkansas by Tom Freeman, 1965.

Brachiopods are present in rocks in Arkansas from Ordovician to Pennsylvanian age. One brachiopod is noted from the Eocene Jackson Group.



Spirifer brachiopods from the Boone Formation. Centimeter scale.





Brachiopod in the Batesville Sandstone. Productus brachiopods from the Fayetteville Shale.

References:

Freeman, Tom, 1966, Fossils of Arkansas: Arkansas Geological Commission Bulletin 22, 53 p., 12 pls., 15 figs., 1 map.